

REMARKS

Applicants respectfully traverse and request reconsideration in view of the new grounds for rejection.

Claims 1 and 3 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Dangschat in view of Griffin et al. and further in view of Bugwadia et al. Applicants respectfully submit that it appears that the cited references may have been inadvertently misapprehended. For example, it is admitted in the office action that the Dangschat reference fails to teach, among other things, switching over between frequencies by using one tuner, when a video blanking interval is detected in a video signal and interpolating video data between a first field of video on the first frequency and the second field of video on the first frequency, displaying the interpolated video data on a display device and displaying the second field of video data on the first frequency. The Griffin reference in combination with Bugwadia has been cited as teaching what Dangschat is missing. However, Applicants respectfully note that Griffin is directed to a completely different system than Dangschat and does not teach what the office action alleges.

For example, Griffin is directed to a method and apparatus for television signal scrambling and teaches using a special code in the vertical blanking interval (VBI) in order to tell the descrambler the beginning of each frame of an incoming scrambled video signal. (See for example, column 12, lines 1-22). Additionally, Griffin teaches that the VBI should be modified or altered by deleting some “number of the horizontal lines with the VBI’s of each frame of the original video signal” (column 5, lines 29-31). The receiver in Griffin must be able to recognize and reconstitute a standard VBI from the modified/altered VBI (column 6, lines 7-10). Finally, Griffin teaches, upon recognizing the receipt of a modified VBI signal by the receiver, to use the information in the modified VBI signal use the special code incorporate therein to decode the scrambled signal.

Applicant's claimed invention is not directed to any television scrambling technique. Additionally, the Applicant's claimed invention is directed to utilizing a standard VBI. Also, the office action appears to misstate the claim language. The office action alleges that it would have been obvious "for one of ordinary skill in the art at the time of the invention to incorporate the teachings of Griffin into the system of Dangschat to provide a VBI detector to detect VBI and switch from one frequency to the other to store frames or pictures of the frequencies." However, the claims require switching frequencies to obtain fields in response to VBI detection whereas Griffin deals with scrambled frames of video with no switching of frequencies at all. Furthermore, Griffin does not teach using a VBI detector but using a detector to detect an altered VBI signal. The altered VBI detector of Griffin actually detects an altered VBI synch word for scrambled video which then indicates a horizontal line number and horizontal pixel number within each frame of the scrambled video signal. Further, if Griffin is combined with Dangschat to teach changing frequencies upon identification of a VBI (or altered VBI as taught by Griffin), then upon changing frequencies the special code stored within the altered VBI of Griffin would not be recognized since the tuner would have changed frequencies thus failing to receive the special code. Consequently, the very purpose of Griffin would be destroyed as a receiver would be unable to unscramble the received scrambled field. As such, taking the actual teachings of Griffin and combining them with Dangschat could not result in Applicants' claimed invention because the teachings would require Dangschat to utilize scrambled video and detect a vertical blanking interval in the scrambled video. Moreover, Griffin actually describes the code word within the scrambled video signal as used to align each frame of the reconstructed video signal with the frame of an incoming scrambled video signal (see for example, Abstract). This is not a field based synchronization scheme as required by the claim. Accordingly, the Griffin reference does not teach what is missing from the Dangschat reference and the claims are in condition for allowance.

Moreover, it appears that the Bugwadia reference also does not teach what is alleged in the office action as Bugwadia teaches a motion compensation image interpolation-frame rate conversion for high definition television. Bugwadia is directed again to a completely different problem than that faced by Applicants or either of the other references and in fact, the Bugwadia reference is directed to the problem of increasing the resolution of an existing video signal having a low frame rate to a higher rate for use with high definition television. The Bugwadia process interpolates from the existing source sequence of frames, missing frames to generate the higher frequency signal. (See for example, column 1, lines 59-67). In addition, it appears that all of the cited portions of the reference in columns 3, 4, 5 and 6 refer to again a frame based interpolation approach. Applicants claim (see e.g. claim 8), among other things, interpolating video data between a first field of video and a next field of video and as such, is a field based interpolation approach. Even if the Bugwadia reference was properly combinable, its teachings still would not render the claimed invention obvious for the above reasons. Accordingly, the claims are in condition for allowance.

As to claims 8, 10 and 11, these claims have been canceled without prejudice.

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Dangschat in view of Griffin and Bugwadia and further in view of Izumi. Applicants respectfully reassert the relevant remarks made above and as such, this claim is also in condition for allowance at least for these reasons. This claim also adds additional novel and non-obvious subject matter.


New claim 21 is also believed to be allowable and support may be found throughout the specification including page 9.

Applicants respectfully submit that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-

listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

Dated: 4/2/05

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